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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/963,526	09/27/2001	Shinji Tomita	KPC-294	9267
23353	7590 04/01/2003			
	HMAN & GRAUER	EXAMINER		
LION BUILDING 1233 20TH STREET N.W., SUITE 501			SHOSHO, CALLIE E	
WASHINGTO	ON, DC 20036		ART UNIT	PAPER NUMBER
			1714	Ь
			DATE MAILED: 04/01/2003	

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)
	09/963,526	TOMITA ET AL.
Offic Action Summary	Examiner	Art Unit
	Callie E. Shosho	1714
The MAILING DATE of this communication ap Period for Reply	opears on the cover sheet wit	h the correspondence address
A SHORTENED STATUTORY PERIOD FOR REPL THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1. after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a repleted in the period for reply specified above, the maximum statutory period.  - Failure to reply within the set or extended period for reply will, by staturent and the period for reply will, by staturent and patent term adjustment. See 37 CFR 1.704(b).  - Status	136(a). In no event, however, may a reply within the statutory minimum of thirty d will apply and will expire SIX (6) MONT the cause the application to become ARA	ply be timely filed  (30) days will be considered timely.  HS from the mailing date of this communication.
1) Responsive to communication(s) filed on	·	
2a) ☐ This action is <b>FINAL</b> . 2b) ☑ T	his action is non-final.	
Since this application is in condition for allow closed in accordance with the practice under Disposition of Claims	vance except for formal matt r <i>Ex parte Quayle</i> , 1935 C.D	ers, prosecution as to the merits is . 11, 453 O.G. 213.
4)⊠ Claim(s) <u>1-3</u> is/are pending in the application		
4a) Of the above claim(s) is/are withdra	awn from consideration.	
5) Claim(s) is/are allowed.		
6)⊠ Claim(s) <u>1-3</u> is/are rejected.		
7) Claim(s) is/are objected to.		
8) Claim(s) are subject to restriction and/o	or election requirement.	
9)☐ The specification is objected to by the Examine	er.	,
10) The drawing(s) filed on is/are: a) □ acce	epted or b) objected to by the	e Examiner.
Applicant may not request that any objection to the	•	
11) The proposed drawing correction filed on	· · · · · · · · · · · · · · · · · · ·	• •
If approved, corrected drawings are required in re		
12) The oath or declaration is objected to by the Ex	xaminer.	•
riority under 35 U.S.C. §§ 119 and 120		
13) Acknowledgment is made of a claim for foreig	n priority under 35 U.S.C. §	119(a)-(d) or (f).
a)⊠ All b)□ Some * c)□ None of:		
1. Certified copies of the priority document	ts have been received.	
2. Certified copies of the priority document		plication No
3. Copies of the certified copies of the prio application from the International Bu	ority documents have been re ureau (PCT Rule 17.2(a)).	eceived in this National Stage
* See the attached detailed Office action for a list	•	
14) Acknowledgment is made of a claim for domest		
<ul> <li>a)  The translation of the foreign language pro</li> <li>15)  Acknowledgment is made of a claim for domest</li> </ul>		
ttachment(s)		
<ul> <li>Notice of References Cited (PTO-892)</li> <li>Notice of Draftsperson's Patent Drawing Review (PTO-948)</li> <li>Information Disclosure Statement(s) (PTO-1449) Paper No(s) 5</li> </ul>	5) Notice of Inf	Immary (PTO-413) Paper No(s)  formal Patent Application (PTO-152)
Patent and Trademark Office O-326 (Rev. 04-01) Office A	ction Summary	Part of Paper No. 6



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## **DETAILED ACTION**

## Claim Rejections - 35 USC § 112

- 1. The following is a quotation of the second paragraph of 35 U.S.C. 112:
  - The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
- 2. Claim 2 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 2 recites that the acrylic resin is "obtainable" by polymerizing acrylic monomer having hydroxyl group as an essential monomer and other monomer. The scope of the claim is confusing because it is not clear if the acrylic is actually obtained from these monomers or just has the potential to be obtained. It is suggested that "obtainable" is changed to "obtained".

## Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 4. Claims 1-3 are rejected under 35 U.S.C. 102(b) as being anticipated by Tanigami et al. (U.S. 5,574,102).



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Tanigami et al. disclose coating composition comprising 20-80 parts polyisocyanate, 80-20 parts acrylic resin which is obtained from hydroxyl containing monomer and other acrylic monomer, 0.1-40 parts fine resin particles, 5-30 parts pigment, and 0.5-3 parts catalyst. The acrylic resin has OH value of 50-200 and number average molecular weight of 2000-8000. The ratio of isocyanate groups in the polyisocyanate to the hydroxyl groups in the acrylic resin is, for instance, 3:1. There is further disclosed a process wherein substrate is subjected to surface treatment, followed by providing coating as described above, followed by topcoat (col.1, lines 5-7, col.4, lines 31-39, col.5, lines 21-27, col.6, lines 35-62, col.7, lines 54-55 and 66-67, col.13, lines 3-9 and 60-61 and 64-67, col.15, lines 40-52, Table in col.13, and Table 2). It is calculated that the ratio of pigment to resin solids (fine resin particles and acrylic resin) is approximately 0.042 (5/120) to 1.5 (30/20).

It is noted that Taniguchi et al. disclose number average molecular weight (Mn) while the present claims require weight average molecular weight (Mw). However, given the relationship between Mn and Mw, i.e. Mw/Mn>1, it is clear that the weight average molecular weight will inherently overlap the weight average molecular weight as presently claimed.

In light of the above, it is clear that Taniguchi et al. anticipate the present claims.

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Lettmann et al. (U.S. 6,025,031) disclose composition comprising hydroxyl containing acrylic resin, polyisocyanate, and pigment, however, there is no disclosure of catalyst or fine polymer particles as presently claimed, and thus no disclosure of the ratio of pigment to resin



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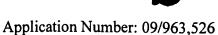
solids as presently claimed or amount of fine particles relative to amount of pigment as presently claimed.

Kawamura et al. (U.S. 5,891,961) disclose composition comprising polyisocyanate, vinyl resin, fine polymer particle, pigment, and catalyst, however, there is no disclosure of amount of pigment, amount of fine particles, or ratio of isocyanate group to hydroxyl group as presently claimed, and thus no disclosure of the ratio of pigment to resin solids as presently claimed or amount of fine particles relative to amount of pigment as presently claimed.

EP 835889 discloses composition comprising water-soluble acrylic resin, water-dispersible resin, pigment, and polyisocyanate, however, there is no disclosure of the amount of pigment or water-dispersible resin as presently claimed or any disclosure of the weight average molecular weight of the acrylic resin and thus, no disclosure of the ratio of pigment to resin solids as presently claimed or amount of fine particles relative to amount of pigment as presently claimed.

EP 665252 disclose composition comprising acrylic resin, polyisocyanate, pigment, and catalyst, however, there is no disclosure of fine polymer particle or amount of pigment as presently claimed, and thus no disclosure of the ratio of pigment to resin solids as presently claimed or amount of fine particles relative to amount of pigment as presently claimed.

Matsuno et al. (U.S. 6,072,008) disclose composition comprising acrylic resin, polyisocyanate, pigment, polymer fine particles, and catalyst, however, there is no disclosure of the amount of pigment or fine polymer particles as presently claimed, and thus no disclosure of the ratio of pigment to resin solids as presently claimed or amount of fine particles relative to amount of pigment as presently claimed.



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6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Callie E. Shosho whose telephone number is 703-305-0208. The examiner can normally be reached on Monday-Friday (6:30-4:00) Alternate Fridays Off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vasu Jagannathan can be reached on 703-306-2777. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9310 for regular communications and 703-872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0661.

Callie E. Shosho

Examiner

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March 28, 2003